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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of: )  
Reithmeyer et al. ) Examiner: Strimbu, Gregory J.  
Serial No: 09/900,442 ) Art Unit 3634  
Filed: July 6, 2001 ) Docket No: A202 1310  
For: ADJUSTABLE DOOR WITH SEALED THRESHOLD, HINGE AND FRAME

TRANSMITTAL OF APPEAL BRIEF  
(PATENT APPLICATION - 37 C.F.R. 1.192)

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on June 22, 2004.

2. STATUS OF APPLICANT

This application is on behalf of  
☒ other than a small entity.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. 1.17(c), the fee for filing the Appeal Brief is  
☒ other than a small entity \$330.00

APPEAL BRIEF FEE DUE \$330.00

4. FEE PAYMENT

☒ The Commissioner is hereby authorized to charge the \$330.00 filing fee to deposit account no. 09-0528.

☒ The Commissioner is hereby authorized to charge any additional fees which may be required or credit any overpayment to deposit account no. 09-0528.

9/22/04  
Date

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Cheryl West



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

**Reithmeyer et al.**

Serial No: **09/900,442**

Filed: **July 6, 2001**

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Examiner: **Strimbu, Gregory J.**

Art Unit **3634**

Docket No: **A202 1310**

For: **ADJUSTABLE DOOR WITH SEALED THRESHOLD, HINGE AND FRAME**

**APPEAL BRIEF**

Mail Stop Appeal Brief-Patents  
Commissioner of Patents  
P. O. Box 1450  
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Sir:

This brief is submitted in triplicate pursuant to 37 C.F.R. 1.192 in support of the Notice of Appeal filed June 22, 2004 in the above-identified application.

**REAL PARTY IN INTEREST**

The real party in interest in the present application is Andersen Corporation, the assignee of the present application.

**RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences known to Appellant, or Appellant's legal representatives, that directly affect, will be directly affected by, or have a bearing on the Board's decision in the pending Appeal.

09/24/2004 ZJUHR1 00000077 090528 09900442  
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### **STATUS OF CLAIMS**

Claims 1-15, 40-44, 47 and 48 are pending in the application, with claims 16-39 having been withdrawn from further consideration by the Examiner under a restriction requirement. A copy of the claims as currently pending are set forth in the attached Appendix.

### **STATUS OF AMENDMENTS**

On June 22, 2004, Applicants filed a Notice of Appeal of the April 29, 2004 Final Office Action. No other amendments or responses were filed in response to the April 29, 2004 Office Action.

### **SUMMARY OF THE INVENTION**

In accordance with 37 CFR § 1.192(c)(5), a concise explanation of the presently claimed invention is set forth below. References to pages and lines of the specification are designated [page:line].

The invention relates to a hinged exterior entryway door system, comprising a door slab, a frame, and a threshold. The entry door system comprises an easily adjustable door slab that can be positioned to maintain an adequate weather seal, a threshold member that provides a base for a weather seal for the door, a water management system comprising the threshold member and end cap corner key system that prevents penetration of water to the interior of the house and protection for wooden framing members in the door system from the adverse effects of water.

[3:22-3:27]

The entryway door system of the invention typically has a frame and a slab hingedly mounted on the frame. The interface between the slab and the frame is sealed using a weather strip system that prevents penetration of weather during use. The weather strip is typically placed at the periphery of the frame. The frame of the entryway system additionally comprises a

threshold member. The threshold member is typically a horizontally positioned extruded thermoplastic or aluminum member having an internal water tank structure installed between generally upright jamb members. The threshold is adapted for the stress of installation into the system of the invention and for traffic placing stress on the upwardly facing surface. Water is managed or maintained within the threshold using end cap corner key seal units that, when installed on the threshold, form an intact water system that can manage water that penetrates the door system. The end caps corner keys are designed with multifunctional elements that seal the water tank, position the end caps corner keys on the threshold and provide support and attachment means for vertical framing members in the entryway system. The entryway system includes a door slab mounted on a hinge to form a door within the frame. The hinges used in the entryway system are adjustable both vertically and horizontally to ensure the slab matches the frame opening and the weather strip system. [3:28-4:13]

### **ISSUES**

1. At issue in the present appeal is whether claims 1-3 and 8-15 have been properly rejected under 35 U.S.C. § 103(a) as being unpatentable over *Headrick* (U.S. Patent No. 5,136,814), and in view of *Fehr* (U.S. Patent No. 6,138,413), *Hellstrom et al.* (U.S. Patent No. 4,381,580), and *Snyder* (U.S. Patent No. 5,752,291); whether claims 4-7 and 40-44 were properly rejected under 35 U.S.C. § 103(a) as being as being unpatentable over *Headrick* in view of *Fehr*, *Hellstrom et al.*, and *Snyder*, and further in view of *Taber* (U.S. Patent No. 5,686,040); whether claims 47 and 48 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over *Headrick* in view of *Fehr*, *Hellstrom et al.*, and *Kurtz* (U. S. Patent No. 4,639,971).

### **GROUPING OF CLAIMS**

The rejections under 35 U.S.C. § 103(a) of claims 1-15, 40-44, 47, and 48 presently pending in this application are based upon the same combination of base references, namely *Headrick, Fehr*, and *Hellstrom et al.*, and accordingly, it is submitted that claims 1-15, 40-44, 47, and 48 should be grouped together.

### **ARGUMENT**

- A. The rejections of claims 1-15, 40-44, 47, and 48 under 35 U.S.C. § 103(a) as being unpatentable over *Headrick, Fehr, Hellstrom et al., Snyder, Taber*, and *Kurtz*, based on the applied combinations of these references, are improper and should be reversed.**

The Examiner rejected as final claims 1-15, 40-44, 47, and 48 under 35 U.S.C. § 103(a) as being obvious in view of a combination of at least these references. The Examiner reasoned that it would have been obvious to one of ordinary skill in the art to modify the assembly of *Headrick* with the teachings of *Fehr, Hellstrom et al., Taber, Snyder* and *Kurtz* to reach the claimed invention. Applicants continue to argue that the Examiner has failed to meet his burden of presenting a prima facie case of obviousness and that the references applied lack the motivation to combine any of their separate teachings to reach the claimed door system. Applicants' arguments regarding the combination and lack of motivation in view of the references have never been addressed by the Examiner, who has instead relied upon the referenced combinations as being obvious in view of their individual disclosures. The Examiner has failed, even after repeated requests by Applicants, to provide a teaching or suggestion in any of the references that would support the proposed combinations. Instead, the Examiner has again highlighted in the Final Office Action dated April 29, 2004 that the rationale to modify the prior art "may be reasoned from knowledge generally available to one of ordinary skill in the art." In

response, Applicants filed a Notice of Appeal on June 22, 2004 since the rejections under 35 U.S.C. § 103(a) as made final by the Examiner fail to disclose or suggest the required motivation to combine the references to create the claimed door system or establish a prima facie case of obviousness. Accordingly, the final rejections should be overturned.

**B. Law of obviousness:**

The basic test for non-obvious subject matter is whether the claimed subject matter would have been obvious to a person having ordinary skill in the art to which the subject matter pertains in view of the prior art. The United States Supreme Court in Graham v. John Deere & Co., 383 U.S. 1 (1966), set forth the factual inquiries to be considered:

- (1) determining the scope and contents of the prior art;
- (2) ascertaining the differences between the prior art and the claims at issue;
- (3) resolving the level of ordinary skill in the pertinent art.

In determining the scope and content of the prior art, the Examiner must first consider the nature of the problem on which the inventor was working. Once this has been established, the Examiner must select, for purposes of comparing and contrasting with the claims at issue, prior art references that are reasonably pertinent to that problem (e.g., the inventor's field of endeavor). See Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc., 21 F.3d 1068, 1071 (Fed. Cir. 1994). In selecting and applying/combining references, hindsight must be avoided at all costs.

The second factor described in Graham requires ascertaining the differences between the cited prior art and the claims at issue. In the instant case, the references fail to disclose the claimed invention, that is, claimed elements are absent, i.e. there are differences between the cited art and the claim. The Examiner failed to identify these differences as required.

In resolving the level of ordinary skill in the pertinent art, as required by the third factor of Graham, the Examiner must place himself in the shoes of a person of ordinary skill in the art at the time the invention was made. The hypothetical person skilled in the art is one who thinks along lines of conventional wisdom in the art and one who does not have the benefit of hindsight.

In order to establish a *prima facie* case of obviousness, it is necessary for the Examiner to present evidence, preferably in the form of some teaching, suggestion, incentive, or inference in the applied prior art, or in the form of generally available knowledge that one having ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. Ex parte Levengood, 28 USPQ2d 1300, 1301 (Bd. Pat. App. & Interf. 1993); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). The legal conclusion of obviousness must be supported by facts or it cannot stand. See Graham. A rejection based on 35 U.S.C. § 103(a) therefore clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art or “viewed after the event.” Goodyear Co. v. Ray-O-Vac Co., 321 U.S. 275, 279, 64 S.Ct. 593, 88 L.Ed. 721 (1944). The proper inquiry thus is whether bringing the references together was obvious and not, whether one of ordinary skill, having the invention before him, would find it obvious through hindsight to construct the invention. Accordingly, an Examiner cannot establish obviousness by locating references that describe various aspects of the pending application’s invention without also providing evidence of the motivating force that would lead one skilled in the art to do what the inventor has done.

**C. A prima facie case of obviousness has not been established.**

The Examiner has failed to establish a prima facie case of obviousness as detailed in MPEP § 706.01(j):

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

A prima facie case of obviousness has not been established because there is no suggestion or motivation to combine the references. Furthermore, all the claim limitations are not disclosed or suggested by any combination of *Headrick*, *Fehr*, *Hellstrom et al.*, *Snyder*, *Taber*, and/or *Kurtz*.

Under MPEP 2142, the burden of establishing a prima facie case of obviousness is initially placed on the Examiner and shifts to the Applicants once a prima facie case has been established. After the initial assertion of a prima facie case of obviousness, if the Applicants then provide evidence that a prima facie case of obviousness does not exist, the burden to prove the existence of a prima facie case of obviousness shifts back to the Examiner. In the present application, the Applicants timely traversed the Examiner's assertion of a prima facie case of obviousness, and the burden shifted back to the Examiner to establish that a prima facie case of obviousness does exist. Instead, the Examiner made final the rejections based upon the cited references and failed to provide an explanation of how the mitered seal of *Fehr* could



accommodate the protruding end cap of *Headrick* without rendering *Fehr* unsatisfactory for its intended purpose. Thus, the Examiner failed to meet his burden of establishing that a prima facie case of obviousness in fact exists. Since the Examiner failed to meet his burden of showing of a prima facie case of obviousness, the final rejections under 103(a) are improper and should be overturned.

Applicants have continued to traverse the reasoning/rational supplied by the Examiner, and have detailed specifically why the proposed combination of *Fehr* and *Headrick* is improper and fails to establish a prima facie case of obviousness. Applicants have noted that *Fehr* provides a form fit, mitered seal joined together by fusion welding and that *Headrick* provides an end cap assembly, which, arguably, could incorporate a seal, but only a seal that could accommodate the end cap in the bottom of the jamb that protrudes slightly beyond the end of the assembly. The form fitting seal of *Fehr* cannot accommodate the protrusion in *Headrick* without modification, which is not shown in either *Fehr* or *Headrick*. Additionally, the modifications that would be required to fit the seal of *Fehr* onto the end cap assembly of *Headrick* would render the seal of *Fehr* unsatisfactory for its intended purpose, which is explicitly prohibited under MPEP § 2143.01. For example, if the references were combined, the resulting combination would use the form of the *Fehr* seal in the *Headrick* assembly, which would not fit and thus not seal. Since the Examiner has continued to fail to provide any teaching or suggestion in the prior art to combine *Fehr* or *Headrick* to result in the claimed entryway system, a prima facie case of obviousness has not been established and the finality of the rejections based upon this combination of references fails to provide the required motivation to combine.

**D. Lack of motivation to combine.**

The rejection of claims 1-3 and 8-15 based on the combination of *Headrick*, *Fehr*, *Hellstrom* and *Snyder* are improper since the Examiner has failed to meet his prima facie case burden by failing to point to any teaching or suggestion to combine those references. The seal of *Fehr* is form fit to its frame therein and this form fit seal would not accommodate the protrusion of *Headrick*'s assembly without modification. This seal accommodation to apply the teachings of *Fehr* to *Headrick* must be supported by teachings or suggestions in the art. However, support for making such a required modification is lacking in *Fehr* and *Headrick*. Since Applicants timely traversed the combination as lacking the required motivation, the burden shifts back to the Examiner to provide the teaching or suggestion in either *Headrick* or *Fehr* to make the combination. The Examiner has failed to provide the required motivation to combine the references in the final rejection of April 29, 2004. Without such support, the rejections under 35 U.S.C. § 103(a) are improper and should be overturned.

The Examiner has failed to show in either *Headrick* or *Fehr* or any other art of record a teaching or suggestion to modify the form fit, mitered seal of *Fehr* in such a way that it can be combined with *Headrick*. Instead, the Examiner refers to another reference, *Taber*, which incidentally was not used in the rejection of independent claims. Regardless, *Taber* fails to disclose a teaching or suggestion to support the Examiner's modification of the seal of *Fehr* to accommodate *Headrick*. *Taber* appears instead to disclose a method of producing closure gaskets that seals differently than *Fehr*, that would not operate in place of the seal in *Fehr*, and that fails to disclose the end cap seal as claimed in the presently claimed system. Accordingly, since the only basis provided by the Examiner for combining *Fehr* and *Headrick* is a reference, *Taber*, which is not the basis of the rejection of the independent claims, and, since *Taber* fails to

provide the required teaching, suggestion, or motivation to combine *Fehr* with *Headrick* to support a prima facie case of obviousness, the Examiner's rejection is improper and should be overturned.

**E. The rejections of independent claim 40 with *Taber* are improper.**

With respect to independent claim 40, the Examiner states that utilizing the economical method of depositing additional material onto a gasket is taught in *Taber* and that one of ordinary skill in the art would be motivated to place a seal in the tank of the groove in the end cap of *Headrick*. Applicants have been unable to find any teaching whatsoever in *Taber* or *Headrick* to support these assertions. None of the cited art discloses a water tank sealed by a sealing element positioned between the end cap corner key and the water tank. If a sealing element were to be positioned between the profile of *Fehr* and the end cap of *Headrick*, the end cap of *Headrick* would be rendered inoperable.

*Headrick* teaches a frame member 12 having a channel 13 and gutter 27. The channel 13 and gutter 27 are in fluid communication with a trough 42 in the end cap 36 so that rainwater collected in the channel and gutter flows freely into the end cap trough 42. Columns 5, lines 14-19, and column 6, lines 59-63. *Headrick* teaches away from positioning a sealing element between the frame member 12 and the end cap 36. Rather, to properly function, *Headrick* requires fluid communication between the frame member 12 and the end cap 36. Thus, as *Headrick* teaches away from sealing between the end cap and frame, *Taber* does not appear to provide any rationale whatsoever to motivate one of ordinary skill in the art to place the seal detailed therein between the tank in the groove of the end cap of *Headrick*. Accordingly, the Applicants continue to aver that the rejection of claim 40 is improper. The rejection of claim 40 from the combination of references based upon the teachings in *Taber* thus should be overturned.

### CONCLUSION

Claims 1-3 and 8-15 are not rendered obvious by *Headrick* in view of *Fehr, Hellstrom et al.* and *Snyder*. Claims 4-7 and 40-44 are not rendered obvious by *Headrick* in view of *Fehr, Hellstrom et al., Snyder* and *Taber*. Claims 47 and 48 are not rendered obvious over *Headrick* in view of *Fehr, Hellstrom et al.* and *Kurtz*.

For the foregoing reasons, the rejections of claims 1-15, 40-44, 47 and 48 by the U.S. Patent and Trademark Office are in error. Reversal of the rejections and allowance of the application is respectfully requested.

Respectfully submitted,

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## APPENDIX

1. An entryway system that can adjust a slab mounted within a frame and maintain a sealed system to exterior weather when closed, the entryway system comprising:
  - (a) the frame comprising a peripheral weather strip positioned substantially on the entirety of both sides and the bottom of the frame, the frame bottom additionally comprising a threshold member joined to the frame with an end cap corner key positioned between the frame and the threshold member, the threshold member forming a tank such that the threshold member can accumulate and drain environmental water to the exterior of the frame; and
  - (b) the slab including an adjustable hinge, said hinge being vertically and horizontally adjustable to sealingly match the slab periphery to the peripheral weather strip.
2. The system of claim 1 wherein the weather strip is positioned on the top of the frame.
3. The system of claim 1 wherein the weather strip is a V-shaped resilient weather strip having a base, the base of the V-shaped weather strip being configured as a hinge member for permitting sealing compression of the weather strip.
4. The system of claim 1 wherein the end cap corner key is a first end cap corner key, and wherein the threshold member comprises an extruded aluminum threshold member having a drain exposed to the exterior, the threshold member having first and second open ends, the first open end being sealed with the first end cap corner key and the second open end being sealed with a second end cap corner key, each of the end cap corner keys comprising:

- (a) a sealing element to prevent water leakage from the open ends of the threshold member;
  - (b) a flange extending from the end cap corner key and positioned to support the sides of the frame; and
  - (c) a positioning structure configured to sealingly position the end cap corner key at the open end of the threshold member.
5. The system of claim 4 wherein the sealing element of the end cap corner key is a resilient seal.
6. The system of claim 4 wherein the sealing element of the end cap corner key is a polymeric elastomer seal.
7. The system of claim 6 wherein the polymeric elastomer seal comprises a foamed polymeric elastomer seal.
8. The system of claim 1 wherein the adjustable hinge includes a shim configured to horizontally adjust the slab to sealingly match the slab periphery to the peripheral weather strip.
9. The system of claim 8 wherein the shim of the adjustable hinge is positioned within the sash.

10. The system of claim 8 wherein the shim of the adjustable hinge is positioned within the jamb.
11. The system of claim 8 wherein adjustable hinge includes a mechanical adjustment configured to vertically adjust the slab to sealingly match the slab periphery to the peripheral weather strip.
12. The system of claim 1 wherein the adjustable hinge comprises a two-knuckle hinge.
13. The system of claim 12 wherein the two-knuckle hinge has an upper knuckle and a lower knuckle, the upper knuckle being supported by a pin that is adjustable in the vertical dimension.
14. The system of claim 13 wherein the pin of the tow-knuckle hinge is configured to move through an adjustment range of about 0.2 to 10 mm.
15. The system of claim 13 wherein the pin of the two-knuckle hinge is configured to move through an adjustment range of about 0.5 to 5 mm.
40. An entryway system that can adjust a slab within a frame and maintain a sealed system to exterior weather when closed, the system comprising an entryway comprising:
- (a) the frame comprising a header, a threshold, an end cap corner key, and at least one jamb, the threshold including:

- (i) a water tank configured to drain environmental water to the exterior of the frame; and
  - (ii) a sealing element positioned between the end cap corner key and the water tank to seal the water tank; and
- (b) the slab mounted on the frame, said slab comprising a mortised hinge arrangement,  
said arrangement comprising a shim and a two-knuckle hinge, the two-knuckle hinge being adjustable in the vertical dimension.

41. The system of claim 40 wherein the two-knuckle hinge is horizontally adjustable using the shim.

42. The system of claim 41 wherein the shim is positioned in the slab.

43. The system of claim 41 wherein the shim is positioned in the jamb.

44. The system of claim 40 wherein the hinge is vertically adjusted by a mechanical adjustment, and is horizontally adjusted by the shim.

47. An entryway system comprising:

- (a) a frame including a header, side jambs, and a threshold, each of the header, side jambs, and threshold defining a perimeter, the threshold including a water tank configured to accumulate and drain environmental water to an exterior of the frame;



- (b) first and second end caps secured to first and second ends of the threshold;
- (c) a seal positioned along the perimeter of the frame;
- (d) a door mounted on the frame, the door including a mortised hinge arrangement adjustable in a horizontal direction and a vertical direction to provide sealing contact between the door and the seal positioned along the perimeter of the frame, the mortised hinge arrangement including:
  - (i) a transition block mounted to the door;
  - (ii) a shim positioned adjacent to the transition block; and
  - (iii) an adjustable hinge positioned adjacent to the shim, the adjustable hinge being adjustable in the vertical direction.

48. The entryway system of claim 47 wherein the transition block includes an insert aperture and the shim includes a tab extending from an edge of the shim, the tab of the shim being positioned within the insert aperture of the transition block for temporarily securing the shim within the transition block.